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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,579	07/30/2003	Motoshi Yamauchi	OHT-0020	6447

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WASHINGTON, DC 20036

EXAMINER

FERGUSON, MARISSA L

ART UNIT	PAPER NUMBER
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2854

DATE MAILED: 11/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/629,579

Applicant(s)

YAMAUCHI, MOTOSHI

Examiner

Marissa L Ferguson

Art Unit

2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-16 is/are allowed.
- 6) ☒ Claim(s) 1-8 and 17-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claims 1-8 are objected to because of the following informalities: The claims appear to be a literal translation into English from a foreign document and have tense form errors. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a). A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sellers (US Patent 6,437,972) in view of Watanabe et al. (US Patent 6,152,627).

Regarding claims 1,3 and 5-8, Sellers teaches key tops (32) on a key sheet (44), wherein the key tops have side surfaces clearance portions (58) configured to prevent contact with interference members (52), at least upper portions of which are situated in displacement regions at bottom surface edges of the key tops allowing displacement when they are depressed (Figure 2 and 4) and wherein key tops (32) have on their side surfaces outwardly protruding flange portions (Figure 2) and have clearance portions formed therein (38). However, he does not explicitly disclose resin key tops. Watanabe et al. teaches a keyboard with resin key tops (22).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention as taught by Sellers to include resin key tops as taught by Watanabe et al., since Watanabe et al. teaches that it is advantageous to provide a material that is used to protect the key tops of the keyboard device.

Regarding claim 2, Sellers teaches a keypad wherein the interference member (52) is a protrusion protruding from a general surface of a surface of the key sheet (Figures 3 and 4).

Regarding claim 4, Sellers teaches a keypad wherein the interference member (52) is a leg portion (54) floatingly supporting the key top-mounting portion of the key sheet so as to be capable of moving toward and away from a substrate surface opposed to the key sheet back surface (Figure 2). However, he does not explicitly disclose resin key tops. Watanabe et al. teaches a keyboard with resin key tops (22). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention as taught by Sellers to include resin key tops as taught by Watanabe et al., since Watanabe et al. teaches that it is advantageous to provide a material that is used to protect the key tops of the keyboard device.

Regarding claims 17-19, Sellers teaches clearance members (58) with outer configurations that conform with the outer configuration of the interference members (52 and Figure 2) and wherein wall thickness is reduced along a height and lower portion of

Art Unit: 2854

the resin key tops (Figure 2). However, he does not explicitly disclose resin key tops.

Watanbe et al. teaches a keyboard with resin key tops (22).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention as taught by Sellers to include resin key tops as taught by Watanbe et al., since Watanbe et al. teaches that it is advantageous to provide a material that is used to protect the key tops of the keyboard device.

Allowable Subject Matter

3. Claims 9-16 are allowed.

The following is an examiner's statement of reasons for allowance: Regarding claims 9 and 13, the prior art does not teach or render obvious a resin relief protrusion formed at an entrance that serves as a boundary between the key top forming portion and the runner portion and protruding from a surface of the cavity, the resin relief protrusion being smaller in width than the entrance and having a molding surface that is convex toward the key top forming portion.

Response to Arguments

4. Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

Art Unit: 2854

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marissa L Ferguson whose telephone number is (571) 272-2163. The examiner can normally be reached on (M-T) 6:30am-4:00pm and every other (F) 7:30am-4:00.

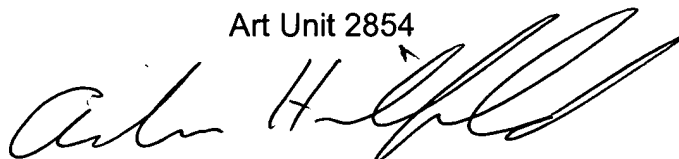
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2854

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marissa L Ferguson
Examiner
Art Unit 2854

MXJ



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